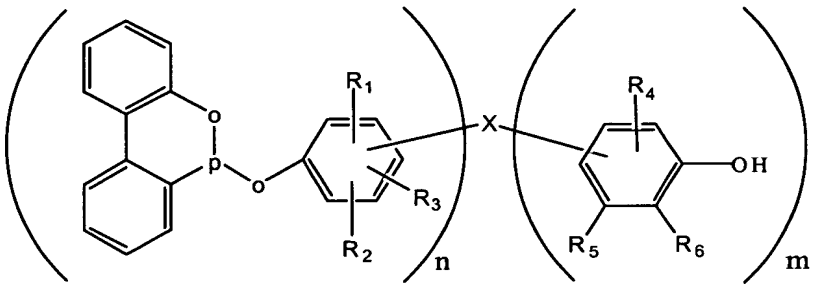
WE CLAIM:

1. A phenolic group-containing phosphonite compound of formula (I)



(I)

wherein

R_1, R_2, R_3, R_4, R_5, and R_6 independently of one another are hydrogen or C_1-C_{18} alkyl,

n and m are integer numbers ranging from 1 to 3, and the sum of n and m ranges from 2 to 4; and

wherein

X, if the sum of n and m is 2, is sulfur or C_1-C_8 alkylene which may be optionally substituted with at least one C_1-C_6 alkyl,

X, if the sum of n and m is 3, is a trivalent moiety of C_3-C_7 aliphatic group, and

X, if the sum of n and m is 4, is a tetravalent moiety of C_4-C_{10} aliphatic group.

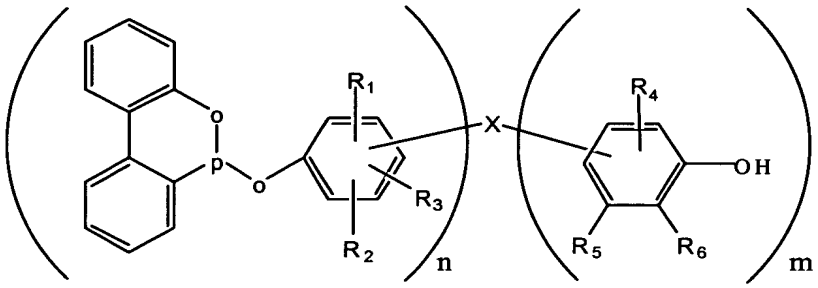
2. The compound of formula (I) as defined in Claim 1, wherein n and m are 1, and X is C_1-C_6 alkyl substituted alkylene.

3. The compound of formula (I) as defined in Claim 2, wherein X is propylmethylene, R_1 and R_4 are methyl, R_2 and R_6 are t.butyl, and R_3 and R_5 are hydrogen.

4. A polymer composition stabilized against oxygen, light, and heat, comprising:

a polymer material; and

a phenolic group-containing phosphonite compound of formula (I)



(I)

wherein

R_1, R_2, R_3, R_4, R_5, and R_6 independently of one another are hydrogen or C_1-C_{18} alkyl,

n and m are integer numbers ranging from 1 to 3, and the sum of n and m ranges from 2 to 4;

wherein

X, if the sum of n and m is 2, is sulfur or C_1-C_8 alkylene which may be optionally substituted with at least one C_1-C_6 alkyl,

X, if the sum of n and m is 3, is a trivalent moiety of C_3-C_7 aliphatic group, and

X, if the sum of n and m is 4, is a tetravalent moiety of C_4-C_{10} aliphatic group.

5. The polymer composition as defined in Claim 4, wherein n and m are 1, and X is C_1-C_6 alkyl substituted alkylene.

6. The polymer composition as defined in Claim 5, wherein X is propylmethylene.

7. The polymer composition as defined in Claim 4, wherein X is sulfur.

8. The polymer composition as defined in Claim 4, wherein said polymer material is selected from the group consisting of polyolefins, polystyrene, and styrene copolymers.

9. The polymer composition as defined in Claim 4, wherein said polymer material is selected from the group consisting of polypropylene, polyethylene, and mixtures thereof.

10. The polymer composition as defined in Claim 4, wherein said polymer material is acrylonitrile-butadiene-styrene copolymer.

11. The polymer composition as defined in Claim 4, further comprising a phosphorus compound selected from the group consisting of tetrakismethylene(3,5-di-t-butyl-4-hydroxyhydrocinnamate)methane, octadecyl 3-(3',5'-di-t-buty-4'-hydroxy-phenyl)propionate, and mixtures thereof.

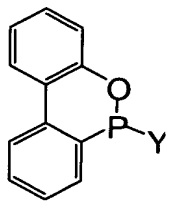
12. The polymer composition as defined in Claim 4, further comprising a phosphite compound selected from the group consisting of tris(2,4-di-t-butylphenyl)phosphite, cyclic neopentanetetrayl bis(octadacyl phosphite), and mixtures thereof.

13. The polymer composition as defined in Claim 12, further comprising a phosphorus compound selected from the group consisting of tetrakismethylene(3,5-di-t-butyl-4-hydroxyhydrocinnamate)methane, octadecyl 3-(3',5'-di-t-buty-4'-hydroxy-phenyl)propionate, and mixtures thereof.

14. The polymer composition as defined in Claim 4, wherein said phenolic group-containing phosphonite compound is in an amount of from 0.05 to 0.5wt% of said polymer composition.

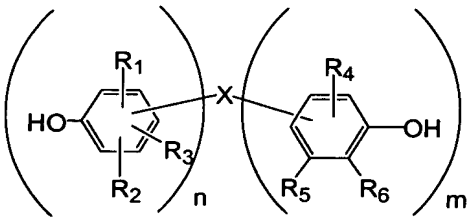
15. A process for preparing the compound of formula (I) as defined in Claim 1, comprising the steps of:

reacting a phosphonite compound of formula (A)



(A)

wherein Y is halogen, with a phenolic compound of formula (B)



(B)

wherein n, m, R_1, R_2, R_3, R_4, R_5, R_6, and X have the same meanings as defined in Claim 1, in a non-acidic reaction condition.

16. The process as defined in Claim 15, wherein n and m are 1, and X is C_1-C_6 alkyl substituted alkylene.

17. The process as defined in Claim 15, wherein X is propylmethylene, R_1 and R_4 are methyl, R_2 and R_6 are t.butyl, and R_3 and R_5 are hydrogen.

18. The process as defined in Claim 15, wherein the reaction is carried out in the presence of a base in an inert solvent.